This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of distributing packets among a plurality of processing devices, the method comprising:

receiving a packet;

inputting at least a portion of the packet into a content addressable memory; and

obtaining a result from the content addressable memory (CAM) to indicate a selected processing device to which the received packet is to be sent whether to redirect the received packet to a selected processing device; and

redirecting the received packet to the selected processing device when the CAM indicates to redirect the received packet; and

sending the received packet to the indicated processing device a destination indicated by the received packet when the CAM does not indicate to redirect the received packet.

- 2. (original) A method as recited in claim 1, wherein the selected device is selected from a plurality of cache systems.
- 3. (original) A method as recited in claim 1, wherein the result indicates to redirect the packet from being sent to a destination specified in the received packet.
- 4. (original) A method as recited in claim 3, wherein the result includes a processing device identification corresponding to the selected device to which the received packet is to be sent.

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- 5. (original) A method as recited in claim 1, wherein the content addressable memory is a ternary content addressable memory.
- 6. (original) A method as recited in claim 1, wherein the portion(s) of the received packet input into the content addressable memory is selected from a group consisting of a destination address, a destination port, a source address, a source port, and a protocol.
- 7. (original) A method as recited in claim 1, wherein the TCAM includes a plurality of entries, and each entry includes a bits-to-match field, an action field, and a redirection destination field.
- 8. (original) A method as recited in claim 7, wherein the redirection destination field identifies a cache system.
- 9. (original) A method as recited in claim 8, wherein the action field indicates whether the received packet is to be redirected.
- 10. (original) A method for facilitating traffic distribution among a plurality of devices, the method comprising generating a plurality of entries within a content addressable memory, each entry including a set of bit values that correspond to at least a portion of a packet and each entry including one or more destination fields indicating where to send a packet that matches the entry's set of bit values and indicating whether to redirect the packet from a destination indicated by the packet.
- 11. (original) A method as recited in claim 10, wherein the destination fields include an action field indicating whether to redirect the packet from a destination indicated by the packet itself.

12. (original) A method as recited in claim 11, wherein the destination fields include a destination identifier indicating a device to which the packet is to be redirected.

13. (original) A method as recited in claim 10, wherein the set of bits values include at least a 1 or a 0 value and a "don't care" value.

14. (original) A method as recited in claim 10, wherein the content addressable memory is ternary.

15. (currently amended) A computer system operable to distribute packets among a plurality of processing devices, comprising:

a first memory;

a content addressable memory; and

a processor coupled to the first memory and the content addressable memory,

wherein at least one of the first memory and the processor are adapted to provide: receiving a packet;

inputting at least a portion of the packet into the content addressable memory; and

obtaining a result from the content addressable memory (CAM) to indicate a selected processing device to which the received packet is to be sent whether to redirect the received packet to a selected processing device; and

when the CAM indicates to redirect the received packet; and

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sending the received packet to the indicated processing device a destination indicated by the received packet when the CAM does not indicate to redirect the received packet.

- 16. (original) A computer system as recited in claim 15, wherein the selected device is selected from a plurality of cache systems.
- 17. (original) A computer system as recited in claim 15, wherein the result indicates to redirect the packet from being sent to a destination specified in the received packet.
- 18. (original) A computer system as recited in claim 17, wherein the result includes a processing device identification corresponding to the selected device to which the received packet is to be sent.
 - 19. (original) A computer system as recited in claim 15, wherein the content addressable memory is a ternary content addressable memory.
 - 20. (original) A computer system as recited in claim 15, wherein the at least a portion of the received packet is selected from a group consisting of a destination address, a destination port, a source address, a source port, and a protocol.
 - 21. (original) A computer system as recited in claim 15, wherein the content addressable memory includes a plurality of entries, and each entry includes a bits-to-match field, an action field, and a redirection destination field.
 - 22. (original) A computer system as recited in claim 21, wherein the redirection destination field identifies a cache system.
 - 23. (original) A computer system as recited in claim 22, wherein the action field indicates whether the received packet is to be redirected.

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24. (currently amended) A computer system operable to facilitate traffic distribution among a plurality of devices, comprising:

a first memory;

a content addressable memory; and

a processor coupled to the first memory and the content addressable memory,

wherein at least one of the first memory and the processor are adapted to provide generating a plurality of entries within the content addressable memory, each entry including a set of bit values that correspond to at least a portion of a packet and each entry including one or more destination fields indicating where to send a packet that matches the entry's set of bit values <u>and indicating whether to redirect the packet from a destination indicated by the packet</u>.

25. (original) A computer system as recited in claim 24, wherein the destination fields include an action field indicating whether to redirect the packet from a destination indicated by the packet itself.

26. (original) A computer system as recited in claim 25, wherein the destination fields include a destination identifier indicating a device to which the packet is to be redirected.

- 27. (original) A computer system as recited in claim 24, wherein the set of bits values include at least a 1 or a 0 value and a "don't care" value.
- 28. (original) A computer system as recited in claim 24, wherein the content addressable memory is ternary.
- 29. (currently amended) A computer program product for distributing traffic, the computer program product comprising:

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at least one computer readable medium;

computer program instructions stored within the at least one computer readable product configured to cause a processing device to:

receive a packet;

input at least a portion of the packet into a content addressable memory; and

obtain a result from the content addressable memory (CAM) to indicate a selected processing device to which the received packet is to be sent whether to redirect the received packet to a selected processing device; and

redirect the received packet to the selected processing device when the CAM indicates to redirect the received packet; and

send the received packet to the indicated processing device a destination indicated by the received packet when the CAM does not indicate to redirect the received packet.

30. (currently amended) A computer program product for distributing traffic, the computer program product comprising:

at least one computer readable medium;

computer program instructions stored within the at least one computer readable product configured to cause a processing device to generate a plurality of entries within a content addressable memory, each entry including a set of bit values that correspond to at least a portion of a packet and each entry including one or more destination fields indicating where to send a packet that matches the entry's set of bit values and indicating whether to redirect the packet from a destination indicated by the packet.

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31. (currently amended) An apparatus for distributing traffic comprising: a means for receiving a packet;

a means for inputting at least a portion of the packet into a content addressable memory; and

a means for obtaining a result from the content addressable memory to indicate a selected processing device to which the received packet is to be sent whether to redirect the received packet to a selected processing device or to forward the received packet to a destination specified by the received packet; and a means for sending the received packet to the indicated processing device.

32. (currently amended) An apparatus for distributing traffic comprising a means for generating a plurality of entries within a content addressable memory, each entry including a set of bit values that correspond to at least a portion of a packet and each entry including one or more destination fields indicating where to send a packet that matches the entry's set of bit values and indicating whether to redirect the packet from a destination indicated by the packet.

33. (new) A computer program product as recited in claim 29, wherein the selected device is selected from a plurality of cache systems.

34. (new) A computer program as recited in claim 29, wherein the result indicates to redirect the packet from being sent to a destination specified in the received packet.

35. (new) A computer program as recited in claim 34, wherein the result includes a processing device identification corresponding to the selected device to which the received packet is to be sent.

36. (new) A computer program as recited in claim 29, wherein the content addressable memory is a ternary content addressable memory.

37. (new) A computer program as recited in claim 29, wherein the portion(s) of the received packet input into the content addressable memory is selected from a group consisting of a destination address, a destination port, a source address, a source port, and a protocol.

38. (new) A computer program as recited in claim 29, wherein the TCAM includes a plurality of entries, and each entry includes a bits-to-match field, an action field, and a redirection destination field.

39. (new) A computer program as recited in claim 38, wherein the redirection destination field identifies a cache system.

40. (new) A computer program as recited in claim 39, wherein the action field indicates whether the received packet is to be redirected.

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